

Response to Comments Document

Total Maximum Daily Load (TMDL) Development for Smith Creek: Aquatic Life (Benthic) and *E. coli* (Bacteria) Impairments

Introduction

A final public meeting was held for the Smith Creek benthic and bacteria TMDLs on March 15, 2004. The draft TMDL report (Total Maximum Daily Load (TMDL) Development for Smith Creek: Aquatic Life Use (Benthic) and *E. coli* (Bacteria) Impairments) was presented at the meeting and made available on the DEQ website. A public comment period on the draft report was held from March 15, 2004 until April 14, 2004. During the public comment period, two sets of comments were received. These comments are presented below, followed by DEQ's response to each comment.

Comments Submitted by Hildegard Muan

Comment 1

I have read the TMDL Draft for Smith Creek and would like to make some comments: There is no doubt in my mind that Tetra Tech and their George Washington University Associates are a dedicated team that has put a lot of work into this project. I cannot judge the computer model approach to watershed problems. However, looking at the tables in section 4, I can't help wondering at some of the data that are used for the model. For example, in Table 4-4 the number of Dairy Cattle in subwatershed 12 is listed as 0. That's where my farm is located. My tenant has 80 dairy cows, and he is not the only dairy farmer in this section.

Response

Dairy cow estimates by subwatershed were obtained from the Department of Conservation and Recreation's (DCR) database and geographic information system (GIS). While this is the best available source for these estimates, such sources are not 100% accurate on a small scale (e.g., on the scale of individual properties). Based on Rockingham County tax maps, the commenter's property is actually in subwatershed 13, near the junction of subwatersheds 12, 15, and 13. It is likely that livestock in this vicinity may have been attributed to the adjoining subwatershed. For instance, 340 dairy cows were estimated in the adjoining subwatershed 15.

Slight discrepancies within or between subwatersheds will not affect TMDL implementation efforts, which will address the entire Smith Creek watershed. Best management practices will be encouraged across the watershed, and cost-share dollars will be available to all qualifying landowners. For instance, subwatershed 12 will not be left out of cost-share dollars for BMPs on dairy farms simply because no dairies were estimated in that subwatershed during the TMDL development.

Comment 2

I also wonder if this enormous input of data, (and taxpayers' money), justifies the result. As I understand it, the main result of the study shows that Smith Creek's impairment is mostly due to excessive sedimentation. This fact has been obvious for quite a while.

Response

DEQ is required by federal law (Clean Water Act) and state law (Virginia Water Quality Monitoring Information and Restoration Act) to develop TMDLs for impaired water bodies. In addition, DEQ is required specifically to develop TMDLs for Smith Creek by a judicial consent decree filed in the United States District Court for the Eastern District of Virginia. In developing these TMDLs, DEQ must rely on scientifically justifiable and legally defensible approaches. While it is absolutely critical that the conclusions from these approaches match anecdotal observations in the watershed, those anecdotal observations cannot be used as a sole basis for drawing conclusions. DEQ is pleased to see that your observations agree with DEQ's stressor analysis, which determined sedimentation as the most probable stressor (or problem).

Comment 3

The creek meanders through my farm for close to $\frac{3}{4}$ of a mile, and I have observed it closely for the past 26 years. This period is extended through the information I gained from Nub Brock, my old neighbor, now deceased, who had lived near the creek since the mid-1930s. We both were completely taken by surprise when, after the big flood in 1986 (or 1987?), we discovered sandbanks along the creek. Up to that time the creek had only deposited silt or mud, as Nub called it. This date coincides with the rapid development around Harrisonburg.

Up until 1990 I regularly swam in the creek with plenty of cows around me. No ill effects! From then on the water level dropped rapidly. True, we had some very dry years, but I do not consider the reason for this drop to be primarily climatic. I believe that excessive residential and commercial development, golf courses, and increasing deforestation are the main culprits.

After Isabelle I have sandbanks 3 feet high, a veritable beach for my grandchildren, even with plenty of shells, mostly bivalves. This shellfish indicates to me a not too badly impaired aquatic life, as appeared from the draft, too.

We all want the same thing: a healthy Smith creek full of water and fish. I do not believe that putting restrictions on farmers will be the answer. Most farmers have learned a lot about environmental standards and are applying them in their own interest. The main culprits are developers, -often from outside our area,-who exercise great power over local governments by dangling revenue-plums in front of their eyes, blinding them to the costs that will have to be paid eventually.

Response

DEQ agrees that urban development, as well as agricultural activities, is a contributor to sediment loads in Smith Creek. For this reason, the TMDL recommends equal sediment reductions from urban and agricultural lands. The TMDL calls for sediment reductions of 22% from pasture/hay lands, croplands, urban lands, and the City of Harrisonburg's municipal separate storm sewer system (MS4) area.

Comment 4

This is all I have to say except for one practical suggestion: It would be helpful to the average reader if you could attach a glossary for all the abbreviations to your final report. Most of them are explained when first mentioned, but since there are so many of them, it is hard to remember from page to page.

Response

The suggested change was made and a glossary was added as an appendix to the report.

Comments from Smith Creek Citizens' Watershed Committee

Comment 1

On behalf of the Smith Creek Citizens' Watershed Committee (SCCWC) we applaud DEQ's efforts to increase public involvement in restoring the Smith Creek Watershed. SCCWC wishes to both stimulate stakeholder involvement and water quality improvements so to restore this impaired TMDL watershed. We wish to work both with you and the Department of Recreation and Conservation to actively pursue implementation efforts by engaging citizens in all possible best management practices.

The SCCWC has had two meetings and submitted a proposal for \$61,000 to the Fish and Wildlife Foundation for, "A Targeted Watershed Septic Action Project." Our group wishes to explore any avenues to improve Smith Creek since this also directly improves our quality of life. This citizen committee hopes to free our creek of human and animal pollution. Also this fecal coliform bacteria threatens our wells, springs and our family health. Finally, SCCWC wishes promote ways we can reduce erosion and sediment and other forms of run-off so to protect Smith Creek's aquatic and benthic life.

SCCWC understands that to restore Smith Creek will require broad community support. We wish to best facilitate this process by maintaining a "can do" positive group attitude to minimize pollution sources that will save our watershed both money and land. To be successful SCCWC must operate on a consensus principle.

Finally, residents of the Smith Creek Watershed must actively consider both future growth and how we can best sustain our present quality of life. How can we better use our land? What are the better ways to work together to preserve our agriculture? How can we stimulate an active and open citizen dialogue? Finally, if we become more urbanized should we invest more into Low Impact Developments or measures to prevent pollution? SCCWC is presently partnering with many supportive organizations to translate these words into deeds.

Smith Creek Citizens' Watershed Committee hopes to preserve our rural landscape so that future generations may enjoy this watershed as we have. If either I or the SCCWC can be of service please contact me at (540) 896-8748. As Chair of SCCWC I appreciate this opportunity to offer our perspective.

Response

DEQ thanks the committee for their support and applauds their initiative in developing local grassroots efforts to protect and improve water quality. The existence and activity of local watershed groups has proven to be instrumental in the success of water quality improvement projects. The committee will no doubt improve the speed and success with which the TMDL is implemented in Smith Creek.